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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,071	09/23/2003	Karim-Thomas Taghizadch-Kaschani	WMP-IFT-965	2703
24131 7590 07/06/2007 LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480			EXAMINER BAYARD, EMMANUEL	
			ART UNIT 2611	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/669,071

Applicant(s)

TAGHIZADEH-KASCHANI, KARIM-THOMAS

Examiner

Emmanuel Bayard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 5, 6 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This is in response to amendments filed on 4/26/07 in which claims 1-14 are pending. The applicant's amendments have been fully considered but they are moot based on the new ground of rejection.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 14 recites the limitation "said first and second asymmetric delays elements" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Salamina et al U.S. Patent No 5,541,541.

As per claims 1 and 8, Salamina et al teaches a receiver circuit for a push-pull transmission method, comprising: at least one first input for receiving a first input signal

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(see figs.3-4 element A); at least one second input for receiving a second input signal (see figs.3-4 element B); an output providing an output signal dependent on the first and second input signals (see figs.3-4 element 11); a detector circuit having a first signal detector connected to said first input (see figs. 3-4 elements COMP1, 16 and col.2, lines 55-67) and a second signal detector connected to said second input (see figs.3-4 elements COPM2, 18), said first and second signal detectors comparing amplitudes of the first and second input signals in each case with a detection threshold and providing detector output signals including a first detector output signal from said first signal detector and a second detector output signal from said second signal detector (see col.3, lines 16-67 and col.4, lines 1-45) said first and second signal detectors each having a control input for setting the detection threshold, said control input of said first signal detector being coupled to an output of the second signal detector and said control input of said second signal detector being coupled to an output of said first signal detector (see figs.3-4 elements 20 and 22 and col.3, lines 31-67); and transistor is the same as the claimed (signal processing circuit) connected to said detector circuit and receiving the detector output signals, said signal processing circuit generating the output signal according to the detector output signals (see figs. 3-4 elements 12 and 14 and col.3, lines 25-30).

As per claim 2, Salamina et al teaches, wherein said first and second signal detectors have a first detection threshold or a second detection threshold according to a signal present at said control input (see figs.3-4 elements 20 and 22 and col.3, lines 31-67).

As per claim 3, Salamina et al inherently teaches, wherein said first and second signal detectors are Schmitt triggers with an adjustable upper switching threshold (see col.5, lines 40-50).

As per claim 7, Salamina et al teaches, wherein said first and second inputs are two of a plurality of inputs connected to said detector circuit, said detector circuit having a plurality of signal detectors each connected to one of said inputs, said control input of a respective one of said signal detectors having applied to it a signal dependent on output signals of other ones of said signal detectors (see figs. 3-5).

As per claim 9, Salamina et al inherently teaches further comprises increasing the detection threshold to the first value for comparing with the one signal after the other signal has reached the detection threshold having a third value.

As per claim 11, Salamina et al inherently teaches which further comprises setting the third value to be less than the first and second values.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 7-9 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lenz U.S. patent No 4,953,070.

As per claims 1 and 8, Lenz teaches a receiver circuit for a push-pull transmission method, comprising: at least one first input for receiving a first input signal

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(see fig.2 element QR1); at least one second input for receiving a second input signal (see fig.2 element QR2); an output providing an output signal dependent on the first and second input signals (see fig.2 element); a detector circuit having a first signal detector connected to said first input (see fig. 2 element K1,) and a second signal detector connected to said second input (see fig.2 element K2,), said first and second signal detectors comparing amplitudes of the first and second input signals in each case with a detection threshold and providing detector output signals including a first detector output signal from said first signal detector and a second detector output signal from said second signal detector (see col.3, lines 10-25 and col.5 ,lines 45-67)) said first and second signal detectors each having a control input for setting the detection threshold, said control input of said first signal detector being coupled to an output of the second signal detector and said control input of said second signal detector being coupled to an output of said first signal detector (see fig.2 elements B1 and B2 and col.5, lines 1-5); and transistor is the same as the claimed (signal processing circuit) connected to said detector circuit and receiving the detector output signals, said signal processing circuit generating the output signal according to the detector output signals (see fig.2 elements T1 and T2 and abstract and col.5, lines 9-12).

As per claim 2, Lenz teaches, wherein said first and second signal detectors have a first detection threshold or a second detection threshold according to a signal present at said control input (see fig.2).

As per claim 3, Lenz teaches, wherein said first and second signal detectors are Schmitt triggers with an adjustable upper switching threshold (see col.1, lines 65-67).

As per claim 4, Lenz teaches wherein said signal processing circuit has an edge spacing evaluation unit for detecting predetermined edges of the detector output signals and provides further output signals dependent on the detector output signals and on a temporal spacing between a predetermined edge of the first detector output signal and a predetermined edge of the second detector output signal (see abstract and col.1, lines 13-15 and col.2, lines 48-53 and col.3, lines 1-15 and col.6, lines 36-39).

As per claim 7, Lenz teaches, wherein said first and second inputs are two of a plurality of inputs connected to said detector circuit, said detector circuit having a plurality of signal detectors each connected to one of said inputs, said control input of a respective one of said signal detectors having applied to it a signal dependent on output signals of other ones of said signal detectors (see fig.2).

As per claim 9, Lenz inherently teaches further comprises increasing the detection threshold to the first value for comparing with the one signal after the other signal has reached the detection threshold having a third value.

As per claim 11, Lenz inherently teaches which further comprises setting the third value to be less than the first and second values.

As per claim 12, Lenz teaches a receiver circuit for a push-pull transmission method, comprising: at least one first input for receiving a first input signal (see fig.2 element QR1); at least one second input for receiving a second input signal (see fig.2 element QR2); an output providing an output signal dependent on the first and second input signals (see fig.2 element); a detector circuit having a first signal detector connected to said first input (see fig. 2 element K1,) and a second signal detector

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connected to said second input signals with a detection threshold, said detector output signals include a first detector output signal and a second detector output signal; and (see fig.2), and transistor is the same as the claimed (signal processing circuit) coupled to said detector circuit and said output, said signal processing circuit receiving the detector output signals and generating the output signal according to the detector output signals (see fig.2 elements T1 and T2 and abstract and col.5, lines 9-12), said signal processing circuit having an edge evaluation unit for detecting predetermined edges of the detector output signals and providing intermediate signals dependent on the detector output signals and on a temporal spacing between a predetermined edge of the first detector output signal and a predetermined edge of the second detector output signal (see abstract and col.1, lines 13-15 and col.2, lines 48-53 and col.3, lines 1-15 and col.6, lines 36-39).

### ***Allowable Subject Matter***

1. Claims 5-6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



Wilcox U.S. Patent No 5,365,118 teaches a circuit for driving two power.

Iwahara et al U.S. Patent No 4,118,599 teaches a stereophonic sound reproduction system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/3/2007

Emmanuel Bayard  
Primary Examiner  
Art Unit 2611

**EMMANUEL BAYARD**  
**PRIMARY EXAMINER**